

2) 35 U.S.C. 112 Rejection

Claims 33-39 are typographical errors and have been amended to be consistent with the independent claim.

3) 35 U.S.C. 103 Rejection

Du Figure 7 illustrates one first route that directs one first workflow. Du teaches that a step in this first route can invoke the execution of a process in a second computer or workflow. The process in the second workflow could be represented as a sequence of steps and be called a second workflow with a second route or route segment. In the example cited by the Examiner, W1 represents a node in the first route and an associated first sequence of steps in a second route, which the claims refer to as a first route segment. The arc from W1 to W2 indicates that W2 is a successor to W1 in the first route and not a route segment as indicated by the Examiner. W2 represents a second node in the first route and has an associated second sequence of steps, a second route segment, in the second route.

The arc from W1 to W2 exists ONLY in the first route. With Du, the first route segment is NOT connected to second route segment. The relationship of the first route segment to the second route segment is ONLY through the first route and processed only by the first workflow where the second workflow completes the first route segment, returning control to the first workflow which then uses the arc from W1 to W2 to then process W2 and invoke the second route segment in the second workflow.

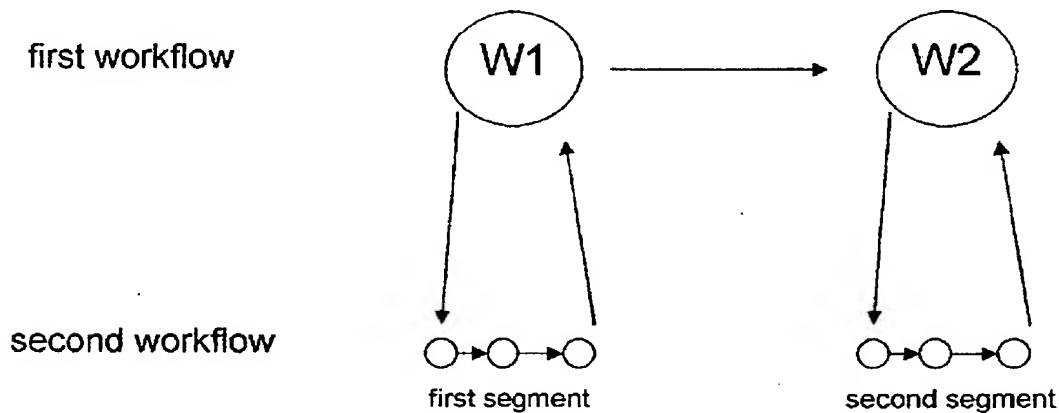


Figure 1 Du

As illustrated in Figure 1 Du, the first route segment is NOT connected to the second route segment in the second workflow. If the first workflow were disabled after invoking the first segment, the first segment would be processed. However, second segment would not be processed by the second workflow since the second workflow has no knowledge of the arc from W1 to W2.

With Du, NONE of the route segments in the second workflow are connected to reflect the paths of the first route. The relationship of nodes in Figure 7 is only processes by the first workflow. Kim Figures 12 and 13 illustrate the "sub-process" structure of the workflow route where a step in a route can invoke a sequence of steps including asynchronous route segments. However, as with Du, the route segments or sub-processes are NOT connected to form an independent route. The first workflow and second workflow in Du are synchronous where the first workflow invokes a route segment in the second workflow and at the completion of that route segment, the second workflow returns to the first workflow which then determines from the first route the successor step and processes the second step. The processing of the first workflow and second workflow are in lock step. With Du, there is no need to provide mechanisms to synchronize or provide notification of processing of specific steps

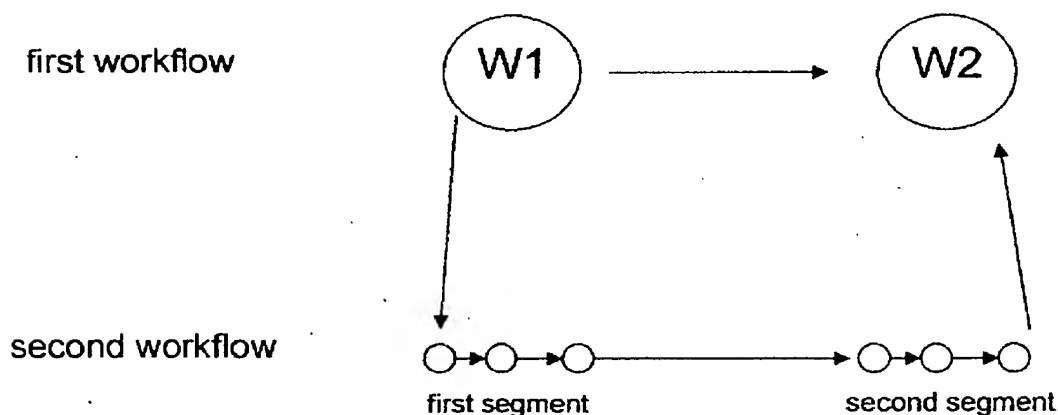


Figure 2 Present Invention

Figure 2 Present Invention illustrates the difference from Du where the arc from W1 to W2 is used to signify the need to connect the first segment to the second segment to generate the route. If the first workflow were disabled after invoking the first segment in the second workflow, the second segment would also complete since the first segment and second segment are connected in the route for the second workflow.

The independent claims provide for two route segments to be connected to avoid the case of a single route segment that is not connected and much like Du or Kim.

The connection limitation also defines the route segment connections to be separate from the object step connections. Thus, the connections in Figure 7 cannot be implied to connect the route segments.

The first workflow and second workflow are asynchronous where the first workflow could be processing step W1 while the second workflow could be processing a step in the second segment. As described in the specification paragraph [0026], the second workflow could be used

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to track a large number of bar coded items where each item uses the route while the object route is only tracking the number of items starting and completing. Also as described in paragraph [0026], the connection of the route segments can include paths such as feedback paths that are used for item repair that are not in the object route. Because of the asynchronous processing of the first route and second route, the claims include functions to synchronize or provide net information between the object route and the route.

Also, Figure 3A of the specification is illustrative of the present invention and the difference from Du Figure 7.

4) Please re-read the discussion of August 28, 2008 in the context of correctly understanding Du.

5) Additional discussion for claims 22, 30, and 33 based on paragraph [0026] and Figure 3A where feedback paths are connected between route segments where the object route does not provide a feedback path. The example in the specification cites an ERP workflow that is tracking items as they flow through major steps in a manufacturing process while the detailed level shopfloor system provides feedback paths to steps earlier in the process for repair of items that fail tests. Du does not provide for connection of the route segments and certainly does not provide connections that are not in the object route, Figure 7.

6) The independent claims 21, 29, and 32 have been amended to claim slightly different aspects of the invention. Claim 21 has an added limitation that starts the two routes together and completing the routes together. Claim 32 has an added limitation that provides for connection of the route segments where there may be connections that are not in the object route. Paragraph [0026] and Figure 3A describe and illustrate this limitation. Claim 24 has been amended and claim 40 added to include this limitation. Claim 25 has been cancelled. The number of claims is still 20.

Summary

Neither Du nor Kim teach forming a route for execution in a second workflow means from an object route for execution in a separate, independent, asynchronous first workflow means by associating each object step in the object route with a route segment and connecting the associated route segments in the sequence of the object steps where there may be connections not in the object route, including feedback connections.

Neither Du nor Kim teach starting the object route in the first workflow and the route in the second workflow and completing the route in the second workflow and the object route in the first workflow.

Neither Du nor Kim teach the synchronization of information such as number of items completing a step in the route with a step in the object route.

The present invention is significantly different from Du or Kim and serves a unique and useful purpose as described in the disclosure.

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The Inventor appreciates the Examiner's thorough and thoughtful examination and responses.
Please allow the amended claims.

The claims are grouped: 21-24, 26-28, 29-31, 40 and 32-39 where claims 21, 29, and 32 are independent claims.

Please call the Inventor after reading this response so that he may clarify any issues specifically in the discussion of Du and the connection of route segments.

408-757-5862 or e-mail at Ken.Ouchi@Avidtechs.com

Respectfully submitted,



Norman Ken Ouchi, Inventor